

Research and Professional Ethics for the Bio-behavioral Sciences, A502 Syllabus, 2022

Co-Instructors

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Meeting time and place

CISAB, 409 N. Park, 2:00 to 3:15 PM, Fridays, roughly every other week

Class topics

The class will meet for eight sessions starting on the first Friday of the semester. Most of the sessions will be two weeks apart, but please **NOTE** that one of these sessions, on Feb 18, falls out of the sequence due to Graduate Recruitment Weekend in Biology.

Jan 14	<i>Session 1:</i> Introduction to research ethics
Jan 28	<i>Session 2:</i> Dale Sengelaub- Scientific misconduct
Feb 18	<i>Session 3:</i> Armin Moczek- Outreach at an R1 institution
Feb 25	<i>Session 4:</i> Greg Demas- Collaboration and co-authorship
March 11	<i>Session 5:</i> Jeff Alberts- Commercialization and intellectual property
March 25	<i>Session 6:</i> Laura Hurley- Animal and human subjects
April 8	<i>Session 7:</i> Troy Smith- The student-advisor relationship
April 22	<i>Session 8:</i> Kim Rosvall- Data ownership

Expectations of student participants

We feel confident that you are all interested in professional ethics and looking forward to participating. We are looking forward to making this a meaningful experience for all.

- 1. Attendance.** If you are enrolled or participating as a part of your required NIH training, you are expected to be present each time. If you must be absent, please inform the instructor for that day in advance. More than one absence, explained or unexplained, will result in a 5% reduction in the final grade.
- 2. Preparation.** The readings form the basis for discussion, and you should come to class having read the assignments and thought about how they relate to the day's subject.
- 3. Participation.** This will take two forms.

Think piece: Some of your instructors may ask for a 'think piece' in advance of their session (to be uploaded to Canvas by 5PM on the Thursday before class). Typically ~1 page (single spaced), these pieces will serve to stimulate the exchange of ideas. For example, you might elaborate on one of the readings, state a reasoned opinion (ideal), or draw a connection between one week's and another week's readings. You might also describe a personal experience, but please use this approach to stimulate discussion, rather than simple story-telling. You can pose (and begin to answer) discussion questions that you plan to bring to class for discussion in person. Alternatively, you might be given a specific assignment for a session.

One purpose of these pieces is to help instructors leading the sessions to include the interests and opinions of people in the class in the discussion; another is for you to prepare your minds, and to ensure that everyone's ideas contribute to each class. Please plan to prepare pieces that you are proud of, and share your ideas in class.

Speaking in class: The other important aspect of participation is speaking in class. This comes more easily to some than to others, but all of you are strongly encouraged to contribute in this way. If in the past you have tended to dominate discussions, please edit your thoughts before you speak. If you tend to hang back in discussion, you may be editing too carefully - please take the plunge and offer your views to your classmates. Everyone can improve their ethical judgments by listening and by articulating their arguments.

All of us – instructors and students alike – should aim to be respectful of others' opinions as we discuss challenging ethical dilemmas that arise in research.

Grading will be the basis of class participation (40%), attendance (20%), and think-pieces (40%).

Leading Discussions, summarized from Brinkley et al. 1999. The Chicago Handbook for Teachers. A Practical Guide to the College Classroom. U of Chicago Press, Chapter 3

Varieties of Discussion

Discussions are opportunities to actively obtain information, consider arguments, test ideas, and develop skills.

Attributes of successful discussion: everyone participates, the interaction is intense, and people come away with a sense of having learned something.

Two types. One type lead by the instructor, Socratic in method, where the teacher asks students respond, the teacher asks again, a discussion ensues, but there is a goal in mind.

The second type is the seminar: The instructor is present and prepared, but the discussion is mediated and guided by students. The instructor often poses

questions at start of class but there is no predetermined path; this works best with 8-15 students.

Goal – active participation by all individuals, expression of multiple points of view, the students learn from other students, learn to have and defend a point of view. A good discussion is a very satisfying learning experience.

As participants in the class, how can you help foster discussion?

Pose a question, but if it's too large, expect little response. So often best to begin with a specific question or ask students to write a brief response to a question and then share it. Or read a quote, pose a series of questions on the board, make a provocative statement...

Tolerate silence, give people a chance to think. Pose questions with multiple answers so discussion can go in several directions.

Encourage others, rephrase questions, prevent transmission of misinformation without embarrassing anyone, keep it even by encouraging the under-participator and tempering the over-participator.

Have something ready (i.e. from your think-piece) when discussion flags. Say something outrageous. Break up briefly in groups.

Try to make a connection with earlier topics...or a connection to an upcoming topic.